

# PV260 Course introduction

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# Agenda

- About me
- About you
- Course organization
- Requirements
- Path to software quality
- Recommended reading
- About Y Soft

# About me

- 5+ years full-time developer
- Mainly .NET/C#
  - Docker, K8S, Helm, Azure
  - F#, Typescript, Python, Go, Java
- <https://www.linkedin.com/in/radimgoth/>

# Course organization

- 12-13 workshops
  - Often lead by me, some lead by my colleagues from Y Soft
- Evaluation
  - Semestral project, 3 milestones (15 points each)
  - 10 points for activity
- Attendance
  - Mandatory

# Requirements

- Bring your own laptop
- Visual Studio 2019/2022 or Rider
  - Keep it updated
  - .NET 5+ dev environment
- Azure subscription?
  
- In person
  - Pen and paper
- Online
  - Zoom
  - Miro <https://miro.com>
  - Slack?

It doesn't take a huge amount of knowledge and skill to get a program working.

Getting it right is another matter entirely. Getting software right is *hard*.

Robert C. Martin - Clean Architecture

# When a software is done right

- Fewer bugs
  - Easy to maintain
  - Easy to add new functionality
  - Easy to onboard new developers
  - Easy to troubleshoot a problem
  - ?
- Secure
  - Scalable
  - Performing well
  - Functionally suitable
  - Reliable
  - ?

# How

- Knowledge
  - SOLID principles and clean code, object oriented design, agile development, software architecture, secure software lifecycle, design patterns,...
- Skills
  - Test-driven development, user story mapping, refactoring, domain-driven design, code reviews, teamwork,...



# Recommended reading

- The Pragmatic Programmer, David Thomas, Andrew Hunt
  - <https://pragprog.com/book/tpp20/the-pragmatic-programmer-20th-anniversary-edition>
- Refactoring, Improving the Design of Existing Code: Martin Fowler
  - <https://martinfowler.com/books/refactoring.html>
- Test Driven Development: By Example, Kent Beck
  - <https://www.amazon.com/Test-Driven-Development-Kent-Beck/dp/0321146530>
- Clean Code: A Handbook of Agile Software Craftsmanship, Robert C. Martin
  - [https://www.amazon.com/gp/product/0132350882/ref=dbs\\_a\\_def\\_rwt\\_bibl\\_vppi\\_i0](https://www.amazon.com/gp/product/0132350882/ref=dbs_a_def_rwt_bibl_vppi_i0)

# About

- Print and scan management
  - Distributed, highly scalable architecture, 3D print, OCR, cloud – K8S, Helm, Azure, HW – card readers, terminals, boards,... .NET Core, React, Java, Spring,...
- LESS without managers
  - <https://less.works/>
- <https://www.youtube.com/watch?v=ig36a8tHAtE>
- [Y Soft | Práce a stáže pro studenty \(daretothinkbyg.com\)](https://daretothinkbyg.com)
- [Y Soft | Pracovní nabídky \(daretothinkbyg.com\)](https://daretothinkbyg.com)